

IN THE
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Pedro J. Moreno et al.

Confirmation No.:

Application No.:

Examiner:

Filing Date:

Group Art Unit:

Title: METHOD AND APPARATUS FOR OBJECT IDENTIFICATION, CLASSIFICATION OR VERIFICATION

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

This Information Disclosure Statement is submitted:

- (X) under 37 CFR 1.97(b), or
(Within three months of filing national application; or date of entry of national application; or before mailing date of first office action on the merits; whichever occurs last)
- () under 37 CFR 1.97(c) together with either a:
() Statement under 37 CFR 1.97(e), or
() a \$180.00 fee under 37 CFR 1.17(p), or
(After the CFR 1.97 (b) time period, but before final action or notice of allowance, whichever occurs first)
- () under 37 CFR 1.97 (d) together with a:
() Statement under 37 CFR 1.97(e)(1) or (2), and
() a \$180.00 fee set forth in 37 CFR 1.17(p).
(Filed after final action, a notice of allowance, on or before payment of the issue fee)

Please charge to Deposit Account **08-2025** the sum of \$0.00. At any time during the pendency of this application, please charge any fees required or credit any overpayment to Deposit Account **08-2025** pursuant to 37 CFR 1.25.

(X) Applicant(s) submit herewith Form PTO 1449 - Information Disclosure Citation together with copies, of patents, publications or other information of which applicant(s) are aware, which applicant(s) believe(s) may be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 CFR 1.56.

() A concise explanation of the relevance of foreign language patents, foreign language publications and other foreign language information listed on PTO Form 1449, as presently understood by the individuals(s) designated in 37 CFR 1.56 (c) most knowledgeable about the content is given on the attached sheet, or where a foreign language patent is cited in a search report or other action by a foreign patent office in a counterpart foreign application, an English language version of the search report or action which indicates the degree of relevance found by the foreign office is listed on form PTO 1449 and is enclosed herewith.

It is requested that the information disclosed herein be made of record in this application.

"Express Mail" label no. EV 215730806 US

Date of Deposit 8/21/03

I hereby certify that this is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to: Commissioner for Patents, Alexandria, VA 22313-1450.

By Margaret A. Norcutt
Typed Name: Margaret A. Norcutt

Respectfully submitted,

Hamilton, Brook, Smith & Reynolds, P.C.

By Mary Lou Wakimura
Mary Lou Wakimura

Attorney/Agent for Applicant(s)
Reg. No. 31,804

Date: 8/21/03

PATENT APPLICATION

Sheet 1 of 2

FORM PTO-1449 LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)	ATTY. DOCKET NO.	APPLICATION NO.	CONFIRMATION NO.
	200308776-1		
	APPLICANT		
	Pedro J. Moreno t al.		
	FILING DATE	GROUP	

REFERENCE DESIGNATION

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	PUBLICATION DATE	NAME	Pages, Columns, Lines Where Relevant Passages or Figures Appear
	1A	2003/0041041	02/27/03	Cristianini
	1B			
	1C			
	1D			
	1E			
	1F			
	1G			
	1H			
	1I			
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	1L				
	1M				
	1N				
	1O				
	1P				

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

1Q	Gu, Y. and T. Thomas, "A Text-Independent Speaker Verification System Using Support Vector Machines Classifier," Eurospeech 2001 (3 pp.)
1R	Fine, S. et al., "Enhancing GMM Scores Using SVM 'Hints'", Eurospeech 2001 (4 pp.)
1S	Kharroubi, J. et al., "Combining GMM's with Support Vector Machines for Text-independent Speaker Verification," Eurospeech 2001, (4 pp.)

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PATENT APPLICATION

Sheet 2 of 2

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	2L				
	2M				
	2N				
	2O				
	2P				

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

2Q	Lodhi, H. et al., "Text Classification Using String Kernels," Journal of Machine Learning Research 2 (2002) pp. 419-444.
2R	Jaakkola, T. et al., "Using the Fisher kernel method to detect remote protein homologies," in Proceedings of the International Conference on Intelligent Systems for Molecular Biology, Aug. 1999 (5 pp.)
2S	Jaakkola, T.S. and D. Hausler, "Exploiting generative models in discriminative classifiers," in Advances in Neural Information Processing Systems, Vol. 11 (1999) 11 pp.

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PATENT APPLICATION

Sheet 3 of 3

FORM PTO-1449 LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)	ATTY. DOCKET NO. 200308776-1	APPLICATION NO.	CONFIRMATION NO.
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	3L				
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	3N				
	3O				
	3P				

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

3Q	Fine, S. et al., "A Hybrid GMM/SVM Approach to Speaker Identification," in Proceedings of the International Conference on Acoustics, Speech and Signal Processing (ICASSP), 2001 (4 pp.)
3R	Smith, N. et al., "Data-Dependent Kernels in SVM Classification of Speech Patterns," Cambridge University Engineering Department Technical Report 387 (April 2001) 56 pp.)
3S	

EXAMINER	DATE CONSIDERED
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